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U.S. ENVIRONMENTAL PROTECTION AGENCY
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Dear Messrs. Berlow and Lesser:

On behalf of the Arizona Department of Environmental Quality (ADEQ), I write regarding EPA's upcoming proposal for regulations under federal Superfund laws to require financial assurance in the hard rock mining sector. The Department is providing this information in cooperation with the State Attorney General's Office, the Arizona State Mine Inspector's Office and the Arizona State Land Department (ASLD). We appreciate the opportunity to provide information to you on this important topic, and would be pleased to discuss these comments further at your convenience.

Background

EPA has provided notice, pursuant to its Identification of Priority Classes of Facilities for Development of CERCLA Section 108(b) Financial Responsibility Requirements, 74 Fed. Reg. 37123 (July 28, 2009), of its intention to require financial assurance of certain hardrock mining facilities pursuant to 42 U.S.C. § 9608(b). Section 9608(b) (1) requires that EPA promulgate regulations requiring facilities to establish and maintain evidence of financial responsibility "consistent with the degree and duration of risk associated with the production, transportation, treatment, storage, or disposal of hazardous substances." Section 9614(d) provides, "[e]xcept as provided in this subchapter, no owner or operator of a vessel or facility who establishes and maintains evidence of financial responsibility in accordance with this subchapter shall be required under any State or local law, rule or regulation to establish and maintain any other evidence of financial responsibility in connection with liability for the release of a hazardous substance . . ." We understand that EPA has asked states where hard rock mining is conducted to address the question of the effect of 42 U.S.C. § 9608(b) and 9614(d) on any state programs that regulate or require financial assurance. This letter is intended to provide that information.

Executive Summary

This submission begins with a brief description of Arizona's financial assurance requirements for hardrock mining facilities, which are found in its Aquifer Protection Permit program, the Arizona Mined Land Reclamation Act, and the regulations governing lessees conducting hard rock mining on State land. The Aquifer Protection Permit program, A.R.S. §§ 49-241 – 252, is a regulatory program, designed to prevent groundwater pollution. It protects Arizona's aquifers by ensuring that facilities are designed, constructed, operated, maintained and closed in a fashion that ensure that no pollutants are discharged to an aquifer or the vadose zone. The financial assurance required as a part of this permit program is available to the State to help it protect an aquifer from discharges in the event that a facility does not meet the requirements of its permit. Arizona's Mined Land Reclamation Act, A.R.S. §§ 27-902 – 1026, requires financial assurance as part of its reclamation program, which requires that hard rock mining facilities repair surface disturbances and revegetate upon completion of their mining activities. Finally, the State Land Department requires financial assurance of its lessees, including those who conduct hard rock mining, to protect the value of the land its holds. A.A.C. R12-5-1805(i).

It is not clear to ADEQ that federal requirements created pursuant to 42 U.S.C. § 9608(b), through the operation of 42 U.S.C. § 9614(d), would preempt Arizona's financial assurance requirements. While CERCLA financial assurance, which is intended to help further CERCLA's goal of making the polluter pay, is available to those with claims under CERCLA, Arizona's financial assurance protects the integrity of important regulatory processes. Because the federal and state systems serve different purposes, ADEQ feels strongly that the federal program should not preempt the state program.

Regardless of EPA's views on how the CERCLA financial responsibility preemption clause affects Arizona's rules, we urge EPA to promulgate financial responsibility regulations that complement Arizona's. We believe that a substantial benefit would be conferred by creating federal financial assurance regulations that recognize and defer to Arizona's expertise in this area. A federal program that deferred to state programs that accomplish the same goal as the federal program—protection of the environment and protection of the taxpayer from being unfairly burdened with cleanup costs—can more efficiently achieve its goal. It can take advantage of established state expertise relating to the state's environment, its economy and industry, and its particular needs. At the same time, such a federal program could provide an additional layer of protection for the taxpayer and the environment, by providing financial assurance for events not covered by state law.

Finally, ADEQ wants to ensure that any federal financial assurance program establishes the required levels of financial assurance based on site-specific considerations of risks for facilities subject to the modern plethora of environmental regulations and controls rather than historic knowledge of the cleanup costs of 19th and early 20th century mining facilities that operated before there were any environmental controls.

Arizona's Financial Assurance Requirements for Hardrock Mining

Arizona protects its aquifers through its Aquifer Protection Permit program, found at A.R.S. §§ 49-241 - 252. Importantly, this program classifies all aquifers as drinking water sources. A.R.S. § 49-224(B). The Aquifer Protection Permit program covers discharging facilities at most, if not all, hardrock mining facilities in Arizona. It includes a requirement that persons permitted under the APP program demonstrate financial capability to construct, operate, close and ensure proper post-closure care of the facility. This financial assurance requirement, like the proposed federal requirement, is intended to help protect the Arizona taxpayer from bearing the costs of unpermitted discharges to the environment.

Two other programs also require that hardrock mining facilities provide financial assurance: both provide coverage to assure completion of reclamation (including appropriate earthwork and revegetation). The first, the Arizona Mined Land Reclamation Act (A.R.S. §§ 27-902 – 1026), requires a reclamation plan and financial assurance for exploration operations and mining units, generally in a presumptive amount of $2,000 per acre. A.R.S. § 27-993(A). "Reclamation" includes "measures that are taken on surface disturbances at exploration operations and mining units to achieve stability and safety consistent with post-mining land use objectives specified in the reclamation plan." A.R.S. § 27-901(13). "Surface disturbance" means "clearing, covering or moving land by means of mechanized earth-moving equipment for mineral exploration, development and production purposes." A.R.S. § 27-901(16). "Stability" means "the condition of the land with respect to its erosion potential and ability to withstand seismic activity." A.R.S. § 27-901(15). The Mined Land Reclamation Act is aimed at only some mining-related activities, as it covers "property that is owned, operated or managed by the same person to develop, mine, concentrate or leach minerals and associated mineral recovery activities," but specifically does not include smelting, refining, fabricating or other metal processing facilities. A.R.S. § 27-901(9).

In addition, State Trust Land lessees who conduct hard rock mining are required to post a reclamation bond and generally provide other financial assurances. A.A.C. R12-5-1805(I). The regulations require that the bond be in "a reasonable principal amount" for the purpose of protecting against "damage to lands, livestock, water, crops or other tangible improvements." *Id.* ASLD manages approximately 9 million acres in Arizona pursuant to a trust created by the Arizona Enabling Act and Constitution. As a landowner and trustee, ASLD must have the ability to protect the future value of its property and to require adequate financial assurances to protect trust assets.

This letter focuses on the effect that CERCLA financial assurance requirements might have on Arizona's Aquifer Protection Permit program and its financial assurance requirements. Arizona's mined land reclamation requirements, including their financial responsibility requirements, serve the important purpose of ensuring that mined land is restored to beneficial use by means of appropriate earthwork and revegetation, but do not address remediation of environmental harms caused by the release of hazardous substances.

Arizona's Pollution Prevention Program

The APP regulatory program, with its focus on pollution prevention, stands in contrast to CERCLA, which seeks to ensure that polluters pay to clean up the messes they create. Thus, while both seek to protect taxpayers from bearing the sometimes astronomically high costs of hazardous substance cleanups and both have financial assurance requirements intended to support that goal, each approaches that goal from a different direction.

Arizona's Aquifer Protection Permit program is regulatory in nature, imposing, through a permitting process, certain requirements on facilities that discharge pollutants to aquifers or the vadose zone. The goal of that process is to eliminate, or at the very least minimize, pollution of aquifers in Arizona. Arizona works to achieve this goal by imposing requirements to make sure that each facility takes all appropriate measures, from design, through construction, operation, maintenance and closure, to limit or eliminate discharges to aquifers. Financial assurance is an essential part of this program, as it provides security that an applicant will have the financial ability to operate, maintain and close its facility in accordance with Arizona's standards.

Arizona begins by making the APP program applicable to "any person that discharges or who owns or operates a facility that discharges."[1] A.R.S. § 49-241(A). The statute defines "discharge" broadly, stating that it means the "addition of a pollutant from a facility either directly to an aquifer or the land surface or the vadose zone in such a manner that there is a reasonable probability that the pollutant will reach an aquifer." A.R.S. § 49-201(12). A number of facilities are defined by statute as categorical discharging facilities that must obtain an individual or general permit. A.R.S. § 49-201(B). The categorical discharging facilities specific to mining include: surface impoundments, mine tailings piles and ponds, solid waste disposal facilities, mine leaching operations, wetlands associated with mine water treatment, and injection wells (such as in-situ copper leaching operations). A.R.S. § 49-201(B).

The process of applying for an APP is structured to further the goal of protecting Arizona's groundwater. There are five demonstrations that an applicant must make: 1) that it will operate using the "Best Available Demonstration Control Technology" (BADCT); 2) that pollutants discharged from the facility will not cause an exceedance of Arizona Aquifer Water Quality Standards[2] at the point of compliance; 3) that the applicant has the technical capability to construct, operate and close the facility; 4) that the applicant has the financial ability to construct, operate and properly close the facility, and 5) that the applicant meets any applicable zoning requirements.

In establishing the ability to meet each of these demonstrations, a facility must provide substantial, detailed, site- and facility-specific information. Thus, Arizona statutes and regulations require the submission of facility-specific information such as as-built drawings,

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[1] There are two types of Aquifer Protection Permits: individual and general. Only individual are addressed here, as general permits do not require financial assurance. Most mines, except for small mines, will require an individual permit.

[2] That Arizona classifies all aquifers for drinking water (A.R.S. 49-224(B)) bears repeating.

information about how the facility will be operated, existing and proposed pollutant control measures, potential pollutants and closure strategy. A.R.S. § 49-243(A). Site-specific information must include a hydrogeologic study of the discharge impact area, as well as information about the groundwater quality in the area and the use of water from aquifers in the area. *Id.* Also required is information such as detailed maps that show property lines, topography, and all types of wells and points of compliance; facility design documents; detailed information about known past discharges; and, detailed information about the BADCT to be used at the facility. A.A.C. R18-9-A202. In fact, the Arizona Mining BADCT Guidance Manual, which provides information about how a mine can demonstrate that it will use BADCT, is just shy of 300 pages. (Available at http://www.azdeq.gov/environ/water/wastewater/download/-badctmanual.pdf)

The financial assurance demonstration, which establishes that the applicant has the "financial capability to construct, operate, close and ensure proper post-closure care of the facility," is an essential element of an application for an individual APP. A.A.C. R18-9-A203 (B). The amount of financial assurance must be sufficient to cover construction, operation and closure. Like the other elements of the APP, the information for this showing is site and facility-specific. Thus, an applicant must provide cost estimates for construction, operation, maintenance and closure, derived by an engineer, controller or accountant, using "competitive bids, construction plan take-off's, specifications, operating history for similar facilities or other appropriate sources," and certify that it can meet those costs. A.A.C. R18-9-A203 (B) and A.A.C R18-9-201(B) (5). The state reviews an applicant's proposed demonstration of financial assurance for both technical and financial sufficiency. An engineer conducts the technical review, looking at financial estimates against plans for closure and post-closure. The Department's Revenue Audit Supervisor in the Business Accounting Section examines the sufficiency of the proposed mechanism from a financial point of view.

CERCLA's Liability Scheme

CERCLA, in contrast, is a liability scheme, and its financial responsibility requirement reflects that difference. CERCLA financial assurance is available to those with claims under §§ 9607 and 9611, if a liable party cannot pay a claim. 42 U.S.C. § 9608(c) (2). The amount of financial responsibility is to be set based on claims experience. *Id.* at 9608(b) (2). The preemption provision in § 9614(d) also speaks in terms of liability, stating that the federal requirement preempts only "financial responsibility in connection with liability for the release of a hazardous substance." By contrast, financial assurance under the APP program may be called on by the State for the purpose of ensuring the construction, operation and ultimate closure of a facility for the protection of Arizona's aquifers in the event that a permitted entity can no longer meet the requirements of its Aquifer Protection Permit.

Limited Reach of Preemption in § 9614(d)

Of the three types of preemption, only one—express preemption—can be analyzed at this time. In the absence of some specificity as to the nature of federal regulations on this topic, it is too

difficult to address either field preemption, which arises when the federal regulatory scheme is so comprehensive that it occupies the field and leaves no room for supplemental state law, or conflict preemption, which applies when "compliance with both the federal and state regulations is a physical impossibility," or when the state law stands as "an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."" *California Fed. Sav. and Loan Ass'n v. Guerra*, 479 U.S. 272, 281 (1987) (defining conflict preemption).

A superficial reading of CERCLA could lead to the conclusion that express preemption applies in this matter, because 42 U.S.C. § 9614(d) specifically addresses the issue, providing that "no owner or operator of a vessel or facility who establishes and maintains evidence of financial responsibility in accordance with this subchapter" shall be required by a state or other local law to "establish or maintain any other evidence of financial responsibility in connection with liability for the release of a hazardous substance from such vessel or facility." However, the only court to consider the matter concluded otherwise.

In *Chemclene Corp. v. Pennsylvania Dep't of Envtl. Res.*, 497 A.2d 268 (Pa. Commw. Ct. 1985), the court held, in an analogous situation, that 9614(d)'s preemption language did not bar a state from requiring financial assurance. There, the judge found that a state statute that required transporters of hazardous waste to file a bond as a condition for obtaining a hazardous waste transportation license was not preempted by 42 U.S.C. § 9614(d). In so finding, the court first pointed to § 9614(a), which states that "[n]othing in this Act shall be construed or interpreted as preempting any State from imposing any additional liability or requirements with respect to the release of hazardous substances within such state." After noting this "broad disclaimer of preemptive intent," the court then analyzed the financial assurance provisions at issue. It characterized the state's requirement as a performance bond, designed to "insure the performance by a transporter of hazardous waste of all obligations imposed" by the state's Solid Waste Management Act and Department of Environmental Resources. *Id.*, at 272. In contrast, it explained, the federal financial assurance requirement is designed to cover "the costs of cleaning up accidental spills of hazardous waste or hazardous materials and the claims resulting therefrom." *Id.*

Similarly, Arizona's Aquifer Protection Permit program is regulatory, devised to assure that discharging facilities do not pollute Arizona's groundwater. The financial assurance required as a part of that program, is like the Pennsylvania financial assurance requirement in *Chemclene*, intended to insure performance of a facility's regulatory obligations. Thus, following the reasoning of the *Chemclene* court, Arizona financial assurance requirements designed to ensure compliance should not be preempted by CERCLA financial assurance requirements related to liability.

While the legislative history of the CERCLA financial responsibility provision and the accompanying preemption provision is sparse, it supports ADEQ's assertion that 9614(d) does not preempt its financial assurance. Thomas Jorling, an EPA official, noted in his testimony that CERCLA "preempts States from establishing . . . financial responsibility requirements which would duplicate the purposes of the legislation but it does not preempt States for other purposes."

Staff of the Committee on Environment and Public Works, U.S. Senate, 97th Congress, Legislative History of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (Superfund), Public Law 96-510, 112 (Comm. Print 1983). Other portions of the legislative history also lend support to ADEQ's contention that the Aquifer Protection Permit program, which seeks to prevent pollution, is different from CERCLA, which tries to get the polluter to pay to clean up its own pollution. Jorling notes that RCRA focuses on "preventing more problems by controlling present and future hazardous waste disposal" (*id.*, at 97), in contrast with CERCLA, which addresses releases. *Id.*, at 100. The APP program is analogous to RCRA, because it is designed to prevent contamination of groundwater by specifying certain standards that must be met in design, construction, operation, maintenance and closure of discharging facilities.

Coverage for Catastrophic Occurrences, Cooperative Federalism and Deference to Effective State Programs

While ADEQ believes that its financial responsibility requirements are an essential part of an integrated program designed to protect the environment, it does recognize that accidental releases may occur in spite of these efforts, and that cleanup of such releases might not be covered by the APP or mined land reclamation programs. ADEQ also recognizes that such cleanup costs could be quite high. In such instances, CERCLA financial assurance could serve as an important backstop, to protect the taxpayer from unfairly bearing the costs of cleanup. For this reason, ADEQ believes that CERCLA financial responsibility regulations that recognize effective state programs like Arizona's will best serve the twin goals of environmental and taxpayer protection.

Importantly, a federal financial assurance program that recognized state programs would be consistent with presidential mandates regarding cooperative federalism, as expressed in Executive Order 13132 and reaffirmed by Presidential Memorandum dated May 20, 2009 regarding Preemption. These presidential mandates recognize the importance, and value, of states' unique solutions to particular problems.

Importance of Adequate Risk Assessment in Setting Financial Assurance Levels

Finally, should EPA promulgate financial assurance regulations that cover hardrock mining facilities in Arizona, ADEQ wants to emphasize that care should be taken in setting the required levels of financial assurance. The statute itself requires that the level of financial assurance be based on "the payment experience of the Fund, commercial insurers, courts settlements and judgments, and voluntary claims satisfaction." 42 U.S.C. § 9608(b) (2). ADEQ believes it is important that any financial assurance requirements take into account the risk associated with hardrock mining facilities as they operate today, rather than being based on experience in cleaning up historical hardrock mining facilities that opened, operated (and were often abandoned) before the modern era of environmental controls. In justifying its decision to begin promulgation of financial assurance regulations with hardrock mining facilities, EPA cited exclusively to cost estimates drawn from experience with historical, heavily contaminated

facilities. In all of the examples cited by EPA, mining began in the late 19th century; even the more recent mining activities that took place at the cited mines occurred before many environmental controls were required. Given this reliance on cleanup costs at historic sites, ADEQ wants to ADEQ emphasize the importance of including information that accounts for modern environmental controls in setting financial assurance amounts.

Again, we thank you in advance for your consideration of this information. We appreciate the opportunity to provide it to you, and would be willing to talk with you at your convenience.

Sincerely,

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